

Notice of Allowability**Application No.**

10/050,243

Examiner

Flemming Saether

Applicant(s)

DOHM, STEPHEN R.

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3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Examiner's Amendment 13 January 2005.
2. ☒ The allowed claim(s) is/are 1-4,6-13,15-26 and 28-33.
3. ☒ The drawings filed on 16 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Swanson on 13 January 2005.

The application has been amended as follows:

The following listing of claims replaces all previous versions and listing of claims, which were previously presented in the instant application.

Listing of Claims:

1. (currently amended) An internally threaded fastener assembly comprising:
a stemmed washer having a spring washer portion, a standoff portion integral with the spring washer portion, and a retaining portion extending inward from an outer perimeter of the spring washer portion, wherein the spring washer portion is configured to deflect an axial distance between an at rest position and an operative position; and
an internally threaded fastener having a peripheral flange, wherein the retaining portion of the stemmed washer extends over the peripheral flange to retain the fastener in the stemmed washer, wherein the spring washer portion and the retaining portion define a cavity for the peripheral flange, the cavity having an axial dimension that is greater than or equal to the thickness of the peripheral flange plus the axial distance.
2. (original) The assembly of claim 1, wherein the spring washer portion is generally conical.

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3. (original) The assembly of claim 1, wherein the spring washer portion extends from the standoff portion at an angle, wherein the spring washer portion is elastically deformable relative to the standoff portion.

4. (original) The assembly of claim 3, wherein the spring washer portion is biased to extend from the standoff portion at an acute angle.

5. (cancelled)

6. (original) The assembly of claim 1, wherein the fastener is rotatable with respect to the stemmed washer.

7. (previously presented) The assembly of claim 1, wherein the standoff portion forms a hollow right cylinder.

8. (original) The assembly of claim 1, wherein the standoff portion has a variable effective length.

9. (currently amended) An internally threaded fastener assembly comprising:
a threaded nut having a peripheral extension; and
a base, comprising:

a washer portion;

a standoff portion, wherein the washer portion extends outwardly from the
standoff portion at an acute angle relative to the standoff portion; and

a retaining portion extending inwardly from the washer portion to capture the
peripheral extension of the threaded nut in a cavity between the
retaining portion and the washer portion, wherein the cavity has an
axial dimension greater than or equal to the thickness of the
peripheral extension plus an axial distance spanned by the acute
angle of the washer portion; and

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a threaded bolt mated to the threaded nut, wherein the shaft of the threaded bolt extends through the standoff portion and a head of the threaded bolt abuts an outer end of the standoff portion at an outer end opposite from the washer portion.

10. (original) The assembly of claim 9, wherein the washer portion is generally conical.

11. (original) The assembly of claim 9, wherein the washer portion is elastically deformable from a first angle relative to the standoff portion to a second angle relative to the standoff portion.

12. (original) The assembly of claim 10, wherein the washer portion is biased toward the first angle relative to the standoff portion.

13. (original) The assembly of claim 9, wherein the standoff portion, the washer portion and the retaining portion form a single-piece structure.

14. (cancelled)

15. (currently amended) An internally threaded fastener assembly comprising:
an internally threaded fastener; and
a base, comprising:

a standoff portion;

a washer portion extending outward from the standoff portion at an angle,
wherein the washer portion is elastically deformable to enable the
angle of the washer portion to be varied an axial distance relative to
the standoff portion; and

a retaining portion extending inward from an outer perimeter of the washer
portion to form a cavity between the washer portion and the retainer

portion to retain the fastener and to enable the fastener to rotate relative to the base, wherein the cavity has an axial dimension greater than or equal to a retained portion of the fastener plus the axial distance.

16. (original) The assembly of claim 15, wherein the washer portion is biased to a specific angle relative to the standoff portion.

17. (original) The assembly of claim 16, wherein the specific angle defines a range of variation in the effective length of the standoff portion.

18. (original) The assembly of claim 15, wherein the elastically deformable washer portion is generally conical.

19. (original) The assembly of claim 15, wherein the elastically deformable washer portion extends at an acute angle relative to the standoff portion.

20. (original) The assembly of claim 15, wherein the fastener is rotatable with respect to the base.

21. (currently amended) A method for making a fastener assembly, the method comprising:

providing an internally threaded fastener;

forming a base with a standoff portion and a washer portion extending outward from the standoff portion at an acute angle;

disposing the fastener on the washer portion; and

plastically deforming the washer portion radially inward to form a skirt portion to retain the fastener in assembly with the base, wherein the washer portion and the skirt portion define a cavity having an axial dimension greater than or equal to a retained

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portion of the fastener plus an axial distance spanned by the acute angle of the washer portion.

22. (currently amended) The method of claim 21, wherein the fastener-retained portion includes a peripheral flange extending radially therefrom the fastener, and wherein the skirt portion is deformed to capture the peripheral flange.

23. (original) The method of claim 21, wherein the skirt portion is deformed with respect to the fastener to permit rotation of the fastener with respect to the base.

24. (original) The method of claim 21, wherein the skirt portion is plastically deformed by a crimping operation.

25. (original) The method of claim 21, wherein the standoff portion is formed to extend a predetermined length from the washer portion.

26. (original) The method of claim 21, wherein the standoff portion forms a hollow right cylinder.

27. (cancelled)

28. (currently amended) A fastened joint comprising:

a first member;

a second member;

a stemmed fastener, comprising:

a stemmed washer having a standoff portion, a spring washer portion integral with the standoff portion, and a retaining portion forming a cavity with the spring washer portion, wherein the spring washer portion is configured to deflect an axial distance between an at rest position and an operative position;

an internally threaded fastener retained in assembly with the stemmed washer ~~by~~ in the cavity between the retaining portion and the spring washer portion, wherein the cavity has an axial dimension greater than or equal to a retained portion of the internally threaded fastener plus the axial distance; and

an externally threaded fastener matingly engaged with the internally threaded fastener, the externally threaded fastener including a head;

wherein the standoff portion extends through the first and second members and the first and second members are fastened between the spring washer portion and the head of the externally threaded fastener, and

wherein the head abuts an outer end of the standoff portion at an outer end opposite from the spring washer portion, such that the standoff portion limits compression of the internally and externally threaded fasteners about the first and second members.

29. (original) The fastened joint of claim 28, wherein the spring washer portion is generally conical.

30. (original) The fastened joint of claim 28, wherein the spring washer portion extends from the standoff portion at an acute angle.

31. (previously presented) The assembly of claim 1, comprising an externally threaded fastener having a threaded shaft configured to extend through the standoff portion and to mate with the internally threaded fastener, wherein the externally threaded fastener includes a head configured to abut an end of the standoff portion at an outer end opposite from the washer.

32. (previously presented) The assembly of claim 15, comprising an externally threaded fastener having a threaded shaft configured to extend through the standoff portion and to mate with the internally threaded fastener, wherein the externally

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threaded fastener includes a head configured to abut an end of the standoff portion at an outer end opposite from the washer portion.

33. (previously presented) The method of claim 21, comprising providing an externally threaded fastener configured to extend through the standoff portion and mate with the internally threaded fastener, wherein the externally threaded fastener includes a head configured to abut an end of the standoff portion at an outer end opposite from the washer portion.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or make obvious the cavity formed by formed by the retaining portion having an axial dimension greater than or equal to the thickness of the retained portion to the nut plus the displacement of the spring washer portion in the context of the claims.

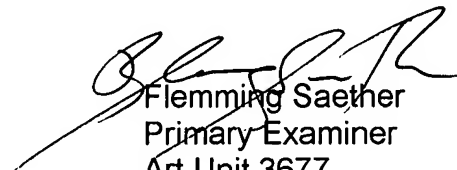
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Flemming Saether
Primary Examiner
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